WE CLAIM:

1.   A tag for use with a monitoring system, the tag having an identification code, the tag is placed within a housing, the tag comprising:

a power supply,

a central processing unit,

at least one strap for attaching the tag to the limb of a person,

a motion sensor for determining the motion of the person wearing the tag;

a second sensor for detecting that the tag was tampered with, and

a transmitter for transmitting a tamper signal to a remote monitoring unit.

2.   The tag of claim 1 further comprises a receiver for receiving data from the remote monitoring unit, said data including predetermined thresholds for the operation of the motion sensor and strap cut sensor.

3.   The tag of claim wherein the transmitter is a radio frequency transmitter.

4.   The tag of claim 1 wherein a motion sensor is one of the following: a tilt sensor, an acceleration sensor, an angular sensor, an inclination sensor, a position sensor.

5.   The tag of claim 1 wherein the second sensor is a proximity sensor for detecting the presence of a limb between the straps attached to the tag.

6.   The tag of claim 1 wherein the second sensor is a strap cut sensor for detecting that at least one of the straps of the tag has been tampered with.

7.   The tag of claim 6 wherein tampered with comprises a cut in or a removal of the strap.

8.   The tag of claim 3 wherein a proximity sensor is one of the following: a capacitance sensor, a skin or a body temperature detector, a skin color detector, a body or a skin odor sensor, heart pulse detector, SpO2 detector, skin humidity sensor, trans dermal blood alcohol sensor.

9.   A method for monitoring and detecting a monitored person's behavior for enhancing tamper detection capabilities, the method comprising the steps of:

examining at least one signal from an at least one tamper sensor located within a tag at predetermined intervals;

processing the at least one signal to determine whether a tamper has occurred; and

transmitting a signal to a remote monitoring unit.

10. The method of claim 9 wherein the signal is a tamper signal.

11. The method of claim 9 wherein the signal is an indication as to the monitored person behavior.

12. The method of claim 9 further comprising the step of determining if at least two tamper detection sensors transmit tamper signals.

13. The method of claim 10 wherein the tamper signal is computed.

14. The method of claim 9 wherein the step of examining the signals of the at least one tamper sensor comprises examining the signal of a motion sensor.

15. The method of claim 14 wherein the step of examining the signal of the motion sensor comprises comparing the signal to predetermined thresholds in order to determine whether the signal fits predetermined behavior criteria.

16. The method of claim 14 wherein the step of examining the signal of the motion sensor comprises transmitting the raw data sensor's readings to a central computer.

17. The method of claim 14 wherein the step of examining the signals of all the tamper sensors comprises examining the signal of the body or proximity sensor.

18. The method of claim 17 wherein the step of examining the signal of the body or proximity sensor comprises comparing the signal to predetermined thresholds in order to determine if the measured signal reaches certain threshold.

19. The method of claim 14 wherein the step of examining the signals of all the tamper sensors comprises examining the signal of the strap cut sensor.

20. The method of claim 19 wherein the step of examining the signal of the strap cut sensor comprises comparing the signal to predetermined thresholds.

21. The method of claim 14 wherein the step of examining is performed in the tag.

22. The method of claim 14 wherein the step of examining is performed in the remote monitoring unit.

23. The method of claim 14 wherein the step of examining the signal comprises comparing the signal to predetermined thresholds in order to determine whether the signal fits predetermined abnormal criteria.

24. A method for monitoring and detecting a monitored person's behavior for distinguishing between different monitored persons, the method comprising the steps of:

examining signals received from at least one motion sensor located within a tag strapped to the limb of a monitored person at predetermined intervals;

processing the signals to determine a pattern of motion related behavior associated with the monitored person;

storing the pattern of motion related behavior associated with the monitored person; and

comparing the pattern of motion related behavior associated with the monitored person with a motion related behavior signal pattern.

25. The method of claim 24 wherein the step of comparing comprises the comparison of motion related behavior associated with the monitored person with a stored motion related behavior signal pattern.

26. The method of claim 24 wherein the step of comparing is performed in the tag.

27. The method of claim 24 wherein the step of comparing is performed in a remote monitoring unit.

28. The method of claim 24 further comprising the step of transmitting an indication signal to a remote monitoring unit.

29. The method of claim 24 wherein the stored motion related behavior signal pattern was previously stored.

30. The method of claim 24 wherein the stored motion related behavior signal pattern is predetermined.

31.   The method of claim 24 wherein the signals received from a motion sensor comprise at least one data unit, each data unit comprising the time and length of movement by the monitored person.

32.   The method of claim 24 wherein the pattern of motion related behavior is a series of data units comprising time and length of movement describing actions.